

A Review of Research on the Effects of Diet Nutrition and Sports Training on Physical Health

Xianfeng Dong^{1,*} and Zhuo Wang¹

¹ The Fundamental department, Yinchuan University of Energy, Yinchuan 750105, China

*Corresponding author e-mail: dx8400181@163.com

ABSTRACT. "There is no comprehensive well-being without the health of the whole people" is the proper meaning of the healthy China strategy, and it is also a historical analysis of the important exposition of the national physical health in the new era. Dietary nutrition and sports training have an irreplaceable and important role in promoting the health of the people. The two complement each other and depend on each other. In this study, through literature data method, logical analysis method and inductive summary method, while drawing on the existing research results, voicing new ideas and quoting new ideas, so as to respect both scientific basis and objective facts, between dietary nutrition and training The dialectical relationship of the country has carried out favorable discussion and active research and judgment, research suggestions, at this stage, The development of sports and the enhancement of people's physical fitness have always been a major task of strategic significance. The employees and employees of enterprises and institutions should continue to strengthen their health checks, the improvement of sports facilities and the professional standards of physical health checks.

KEYWORDS: diet nutrition, sports training, physical fitness

1. Introduction

The times are developing and society is progressing. China is about to enter a well-off society in an all-round way. With the increasing level of economic development, social welfare systems in countries around the world are becoming more and more perfect, and more attention is paid to the improvement of the quality of life of residents in their regions. The outline of the "Healthy China 2030" plan proposes to improve the people's health as the core, make institutional arrangements for protecting people's health, and provide action guidelines for promoting the construction of a healthy China in the next 15 years. Whether in the developed or developing countries, the people's diet has greatly improved. However, when we lament the improvement of living standards, we also face many complicated social problems and social situations that are difficult to control, such as obesity,

hyperuricemia, etc. Caused by unbalanced diet. The problem exists in every corner of the world. Since the reform and opening up, our residents have lived and worked in peace and prosperity, and their living standards have improved significantly. The obesity rate of our nationals has also shown a gradual increase, and it is becoming increasingly difficult to control. Among them, lack of physical training, unreasonable dietary nutritional collocation leading to excess nutrition and fat accumulation in the body are one of the important causes of obesity. What's more, as the unreasonable health concept promoted by the society has been endorsed and supported by more and more people, many boys and girls abandon the concept of dietary nutrition, do not eat or go to the hospital for liposuction to achieve a slim body as a result, the body has been greatly injured. This practice has seriously affected the physical and mental health of the majority of boys and girls. Faced with these complex issues, we should vigorously promote balanced nutrition, reasonable diet, exercise and fitness, healthy beauty, natural beauty, and spiritual beauty from the perspective of public opinion. At the same time, relevant government departments in our country should also adopt reasonable measures to encourage citizens to strengthen their own Physical exercise to improve the health of the whole nation.

2. The impact of sports training and diet nutrition on physical health

In the process of historical transformation from a big sports power to a strong sports power, the enhancement of national physical health requires not only a reasonable diet, but also through scientific and reasonable sports training, and the interdependent symbiotic relationship between the two is extremely important . At present, the National Fitness Program and the Healthy China Strategy have been carried out enthusiastically in all communities in China, but most community residents cannot control the relationship between sports training and dietary nutrition, which has a great impact on physical and mental health. The problems of over-exercise training and dietary deficiencies, dietary overnutrition and under-exercise training are very common and very common in real life. Therefore, it is very important to regulate the relationship between diet nutrition and sports training, and it is imminent. While the state advocates the reasonable combination of sports training and dietary nutrition to improve the physical fitness of the people, it should also educate the citizens on sports nutrition and sports training, popularize the knowledge about sports science, and enhance the residents' awareness of physical fitness. And formulate appropriate diet and sports training programs for the people, through the effective combination of nutrition and sports training to achieve the purpose of enhancing the people's physical fitness. Nowadays, many experts and scholars at home and abroad have proposed solutions to the national physical health, such as influencing public opinion from the perspective of nutrition and sports training, while cultivating the national diet and nutrition awareness, and encouraging the national to actively participate in various sports training.

3. The importance of dietary nutrition and sports training

According to the above research, it is concluded that dietary nutrition and sports training have a significant impact on the people's physical health, and there is no comprehensive well-being without the health of the whole people. For ordinary people who do not have a healthy diet and reasonable exercise awareness, health awareness guidance should be actively strengthened; for people with health and exercise awareness, scientific health guidance should be strengthened. Let each resident recognize the necessity of health while helping them learn how to use the reasonable combination of diet and exercise training to achieve the purpose of physical fitness. At present, in the field of sports health, student nutrition meals are commonly used as a case to illustrate the importance of dietary nutrition: students are the pillars of the country, and the physical and mental quality of students is related to the future and destiny of the development of the entire country. But not every parent or student can recognize the importance of nutritional supplements. Therefore, allocating nutritious meals to students will become a top priority [1]. In view of this situation, according to the needs of national development, the Chinese government implements a nutritious meal program for the purpose of promoting the healthy growth of young children. Data from recent years show that under the implementation of the program, the problem of undernutrition or overweight of students is still a hot issue in society, but the nutritional status of students has been significantly improved and greatly strengthened. During the growth of students, a large part of their healthy physique comes from dietary nutrition, and the unreasonable dietary nutrition structure will seriously affect the physical development of students [2]. Of course, not only the diet, but also the impact of sports training on the growth of teenagers, only by participating in sports activities and sports training, can we effectively promote the absorption of nutrients and the consumption of excess nutrients. The latest research shows that proper exercise every day can improve one's work or study efficiency in a day, and to a certain extent is also conducive to the health of personal body organs, long-term persistence, can play a role in enhancing resistance and preventing diseases [3]. In summary, whether it is sports training or diet nutrition is worth everyone's attention.

4. Analysis of comprehensive factors influencing national health

4.1 The important impact of lifestyle on the national health

In a modern society where material life is gradually enriching, the public's lifestyle is gradually diversifying; although the lifestyle is a private matter, the unhealthy lifestyle has a certain degree of homogeneity, resulting in health management becoming a public in a sense affairs. The "bad lifestyle list" is like a mirror, reminding and warning people to take the warning, fully recognize the harmfulness of bad lifestyles, and make adjustments and changes. Research Group of the State Sports General Administration. The research results of the national physical exercise in the past decade have found that the national physical health is closely related to the national living habits. Poor living habits combined with insufficient physical exercise, more and more people's physical fitness began to

decline. Facts have proved that the treatment of many diseases at this stage can be improved by establishing a healthy lifestyle. Due to busy work and other reasons, some people arrange their own diet and exercise plans at will. A studio's research on this group of people has also shown worrying results. Therefore, advocating a good lifestyle is effective in improving the people's physical fitness. way. The choice of lifestyle is also a process of shaping self-identity and social identity. For people, the key to changing unhealthy lifestyles is to realize the remodeling and renewal of the "Web of Meaning"-the easiest and most effective way to obtain health, the most daily and most important strategy for personal health management Cultivate a healthy lifestyle.

4.2 Limitations of physical health screening

Physical examinations are measured and screened in accordance with international norms. The current physical examination method is mainly through the examination of physical fitness, exercise capacity and health status. Due to the limited technological level, although physical fitness testing is an important method to check the physical condition of the human body. However, just checking one or two items cannot fully detect the national physical condition. Such test results can only show whether the national body is healthy or not. The scientific basis is not yet sufficient. Under such limitations, although the nationals received a qualified test form, the nationals still could not fully understand their own health status, and were worried about whether there were hidden health risks in other parts of their bodies. Even after a comprehensive examination of the body, there will be deviations due to instrumental errors, human errors, and technical limitations current. The inspection equipment is complicated, the technology is advanced, the procedure is complicated, and there are many projects. In fact, this is just the advanced technology and machine. From a medical point of view, the inspection has great limitations and lacks further demonstration in practice. Because of the instruments and equipment, only physical and visible changes can be seen on the physical level. As for the invisible and visible functional disorders, the equipment cannot be checked. In fact, functional changes are early lesions, and long-term dysfunction will cause material changes. That is to say, the "early disease" found in the examination is already "late" in the eyes of the patient, and the "late disease" in the eyes of the doctor is already incurable in the eyes of the patient. Making the people aware of the limitations of medicine helps to change the concept of "focusing on treatment" to "centering on people's health". Regardless of whether we attach importance to prevention, or live to die, and live an active life, facing the limitations of medicine finally ends up in improving people's quality of life, so as to better meet the people's longing for a better life.

5. The Reasonable Way to Strengthen National Health

5.1 Enterprises and institutions should conduct health checks on all employees

The government should use policy measures to effectively intervene, and earnestly implement the development concept of "50 years of healthy life and a happy life", stipulate the physical health standards that each worker in each industry should meet, and require all enterprises and institutions to have at least one A physical health check is carried out once a year. If the physical health does not meet the standards, it will not be allowed to engage in work in the industry. Then let employees realize the importance of their own health. Use this policy to stimulate employees to strengthen the purpose of physical exercise. In this way, on the one hand, the employee's excellent physique can increase the employee's work efficiency, on the other hand, the employee's healthy physique will also have a positive impact on the employee's life.

5.2 Strengthen the improvement of sports facilities

Without stable sports venues, mass sports activities cannot be carried out effectively. A perfect sports venue is an important indicator for achieving a strong sports nation. Many people now have the time and ideas to exercise, but suffer from the lack of a suitable sports venue and give up the purpose of training. Therefore, it is very necessary and necessary to establish a perfect sports place near the community residential building to create an atmosphere of national sports.

5.3 Strengthen the professional standard of physical health examination

At present, the national physical fitness monitoring has certain limitations, lack of professional staff, the significance of physical fitness testing is to let the test realize the lack of their physical fitness, so as to effectively strengthen the response measures. If the testing personnel and instruments are not professional enough and the testing items are not comprehensive enough, then the results of the physical monitoring will cause false guidance to the subject. Therefore, the professionalism of physical fitness testing will also become very necessary. It is recommended that sports-related departments and domestic sports colleges and universities strengthen industrial-academic cooperation, coordinate education, and attract college sports and human science graduates to work in the professional field.

6 Analysis and discussion

The ultimate goal of sports training is to improve athletes' competitive ability, and the ultimate goal is to prepare athletes for excellent athletic performance. The balanced development of dietary nutrition plays an important role in improving athletes' competitive ability and achieving excellent results in training and competition. The diversity of nutritional diet combinations is the basic condition for maintaining physical health, and sports training consumes a lot, and the demand for nutrients is relatively greater. In the short term, the loss of one or several trace

elements or the imbalance of water and electrolytes can be supplemented by sports function drinks or nutrient solutions, but in the long run, a large amount of dietary fiber, various vitamin-rich vegetables and fruits are diversified by comprehensive dietary nutrition. This research analyzes and discusses the relevant indicators of the current dietary nutrition and sports training on physical fitness evaluation through investigation and research.

6.1 Vitamins

For athletes, a minor vitamin deficiency may be harmful to exercise capacity. Through relevant research, it was found that after dietary interventions for athletes, their intake in dietary surveys after interventions increased significantly[4]. Since the diets of athletes are strictly controlled, in order to avoid accidents, there is not much added in the interventions. The animal liver used milk and egg products more, and the results of the dietary survey after the intervention showed that the effect was ideal. In the previous literature on dietary surveys, it was found that some athletes do not like to eat fresh fruits and vegetables, and the vitamin C intake of these athletes is far lower than other athletes. Vitamin C intake has increased significantly. Because athletes' absorption capacity of the gastrointestinal tract decreases after exercise, the excretion of sweat, urine, and feces increases, the turnover rate of vitamins in the body accelerates, and the energy metabolism increases. It is necessary to pay attention to the vitamin intake of athletes. Only after a large intake of foods rich in vitamins can athletes supplement enough vitamins for training life. Related research shows that the initial digestion time of vitamins in the gastrointestinal tract is about 1-2 hours, so it is more reasonable to arrange exercise training after 2 hours of eating. In addition, after a large amount of exercise training, the whole body blood will be preferentially distributed to the brain and related muscles, and the blood in the gastrointestinal tract is relatively small. At this time, vitamin supplementation will affect the decomposition and digestion of food. Generally speaking, it is a more reasonable arrangement to choose to eat after exercise training for 2h.

6.2 Minerals

Minerals are important substances that constitute human tissues and maintain normal physiological activities[5]. They are divided into essential microelements and essential trace elements according to the content and daily needs in the human body. The criterion for distinguishing between the two is that elements whose total amount is greater than 0.01% of human body weight and whose daily requirement is greater than 100 mg are essential macro elements, and elements whose total amount is less than 0.01% of human body weight and whose daily requirement is less than 100 mg are essential trace elements[6]. It is of positive significance to maintain the stability of the internal environment and the recovery of sports fatigue by supplementing the corresponding trace elements in a timely and appropriate amount.

The dietary investigation before the dietary intervention did not find that the athletes had a significant lack of mineral intake, so the dietary intervention did not intervene with the athletes' mineral intake. The calcium intake of athletes after dietary intervention and the calcium intake of female athletes were significantly higher than before dietary intervention[7]. The analysis may be due to the increase in egg and milk foods and the increase in meat during vitamin intake intervention. The digestion, absorption and utilization of minerals requires a time course. When the athletes perform initial exercise training, the exercise process often affects the normal eating time. The accidental eating time changes and the body will adjust itself, but the long-term unstable movement or eating time will lead to the disorder of the memory time of the body's intake of nutrients, making it impossible to supply when nutrients are most needed, and blindly ingesting a large amount of fat and protein substances when nutrients are not needed[8]. It is beneficial to the effect of sports training and a healthy diet, thereby affecting the overall schedule of sports training.

6.3 Carbohydrate

Sports training requires very high carbohydrate reserves[9]. Insufficient carbohydrate intake will affect the training status of athletes and the metabolic process of other substances in the body. Increasing the amount of exercise, reducing eating, and thus reducing body fat will cause the body's energy imbalance in the short term, and it is more likely to cause disease and harm the health of the body in the long term. Therefore, in the arrangement of sports training plans, it is necessary to reasonably match the nutritional intake ratio of three meals at a time, so as to balance the nutrients required by the body and supplement the energy consumption of the body during sports training. If athletes have chronic carbohydrate insufficiency, it will not only affect the training effect and competition performance, but also make athletes often feel tired, and their physical function recovery rate is slow. Because the entire process of sports training is greatly affected by the ambient temperature, the requirement for fat intake is relatively low, but it is found in the dietary survey that athletes consume more fried foods, especially snacks, which is unfavorable for athletes. 80% of the muscle composition is protein, and studies have shown that athletes should consume twice as much protein as ordinary people. Protein not only increases muscle strength, but also participates in the synthesis of hemoglobin and various enzymes. When the load on the muscle increases, the muscle cells are destroyed, and the repair of the muscle cells requires the consumption of proteins to break down the blood cells and release hemoglobin, thereby providing energy for the synthesis of muscle cells. During the dietary intervention period, he organized coaches to conduct temporary rounds of the dormitory of athletes, check snacks and other snacks, and ideologically educate the athletes. Fundamentally exercise training intervention through diet.

6.4 Physiological and biochemical indicators

The hemoglobin, serum ferritin, and blood urea in athlete's serum are not only the feedback of athlete's athletic ability, but also the most objective and effective feedback on the athlete's physical function and whether he can complete the training plan, reach the training volume and training intensity required by the plan. Fat plays a very important role in the overall process of sports training, and diet is the most important point in all factors affecting fat metabolism, and if the fat metabolism is disordered, it is easy to induce various cardiovascular and cerebrovascular diseases. Increased blood lipids can cause a variety of related diseases, of which the incidence of coronary heart disease will be greatly increased, and severe chylomicronemia can also lead to acute pancreatitis[10-12]. For the body, the hazards of hyperlipidemia are hidden, gradual, and systemic. The most direct and severe damage is to cause atherosclerosis in the whole body. If the artery is severely blocked by atherosclerotic plaque, it will affect the whole body. The supply of blood oxygen in vital organs has serious consequences. Serum total cholesterol, triglycerides, high-density lipoprotein and low-density lipoprotein are the most basic indicators reflecting the body's blood lipids. Serum total cholesterol refers to the sum of cholesterol contained in all lipoproteins in the blood. Causes the above hyperlipidemia, and high-density lipoprotein is transported from the blood vessel to other organs, such as to the kidney for metabolism and to muscle tissue for energy metabolism, while low-density lipoprotein plays the opposite role : It transports cholesterol from other organs to blood vessels. When the content of low-density lipoprotein increases, the blood vessel walls will be covered with lipids, affecting the normal flow of blood.

7. Conclusion

Since the Eighteenth National Congress of the Communist Party of China, there has been a major change in the concept of universal health. From the center of treating diseases to the center of people's health, the pattern of China's general health is taking shape. The change of health concept has been deeply rooted in the people from the ancient people's "work to cure the disease, not cure the disease" proposed by the ancients thousands of years ago, to "everyone is the first person responsible for their own health" advocated by the whole society. The change of health concept requires not only disease prevention and control personnel to do health maintenance and other disease prevention and control work, but also the whole society to do a good job of health promotion, passing health knowledge to everyone, so that the people become the masters of health maintenance. It can be seen from the data at this stage that the current status of the physical fitness of our nationals has been better improved, but there are still malnutrition caused by unreasonable diets, improper exercise schedules and poor living habits. Problems such as obesity and decreased body resistance. One way to solve these problems is to promote dietary nutrition. Therefore, to strengthen the dietary nutrition education of the people and popularize the nutritional collocation skills, while improving the people's physical fitness through dietary balance, the people also need reasonable sports training to assist. Through the combination of reasonable exercise training and balanced diet, the national resistance is increased. At the same time, the government also needs to

encourage citizens to conduct professional and comprehensive physical fitness tests on a regular basis, so as to detect the weak links in certain parts of the citizens themselves, and then increase their physical fitness through correct nutrition matching and targeted sports training.

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